

MEETING HIGHLIGHTS
Hanford Site Technology Coordination Group
Management Council

May 20, 1998
EESB Snoqualmie Room
8:30 a.m. - 12:30 p.m.

PURPOSE

- To discuss barriers to technology deployment and suggestions for enabling progress
- To understand the contribution of the Pacific Rim Enterprise Center

AGENDA

INTRODUCTION/ANNOUNCEMENTS

Bob Rosselli chaired the meeting in Lloyd Piper's absence.

UPDATES

- Concrete Decontamination Video (Shannon Saget, DOE-RL)
Shannon showed a video of three concrete decontamination technologies: concrete shaver, concrete grinder, and concrete spaller.
- HTDC Update (Dave Biancosino, DOE-RL)
Dave announced that the monthly reports from FDH and BHI will be distributed to the STCG Management Council as regular updates. The contractors were asked to summarize progress to date and to modify the report format to improve clarity.
- Subgroup Oral Reports (Subgroup Leads)
The Subgroup Leads provided highlights from recent Subgroup meetings. An update was also given on the ASTD call for proposals, which will be reviewed by the Subgroups prior to submittal on June 12.

AM OF THE MONTH (Pete Knollmeyer, DOE-RL, Facility Transition)

Barriers to Technology Deployment

Pete discussed barriers to deployment and recommended that the STCG pick a pilot project, secure funds, write an RFP, run the pilot project, and document and communicate any baseline improvements. Bob Rosselli will raise the subject with the Site Management Board and report back to us. The next AM of the Month will be Don Wodrich, TWRS.

ER DEPLOYMENT ISSUES (John Murphy, DOE-RL, Environmental Restoration)

John outlined his views on roadblocks to technology deployment and provided a status report on the ITRD Project. An issue that came up the day before the meeting was a letter sent from the Yakama Indian Nation to DOE Headquarters that indicated they felt the ITRD process was not clearly defined. The Management Council felt it was inappropriate for the Yakamas to send the letter to DOE-HQ before first trying to resolve their issues in the STCG forum. There was a lot of discussion about the role of the STCG and how to go forward with demonstrations. It was decided to have a smaller group work offline to try to resolve the issues.

PACIFIC RIM ENTERPRISE CENTER (Roger Collis, et al.)

Due to time constraints, this topic was delayed until next month.

FUTURE AGENDA ITEMS

- Pacific Rim Enterprise Center
- S&T Needs Process – schedule, improvements, big picture
- AM of the Month – TWRS (July)
- Feedback from SMB on Pete Knollmeyer’s Recommendations for a Pilot Project
- Panel Discussion with Project Managers and Regulators on Barriers to Demonstration and Deployment
- What does STCG “support” mean? – endorsement, consensus, protocols
- Tracking Demonstrations and Deployments – Status Update – success and failures
- Technology Insertion Points in Project Baselines
- Cost Savings Methodology/Format (later)

MEETING REVIEW / WRAP-UP

The next STCG Management Council meeting conflicts with the ITRD workshop on June 16-17. We will try to change our meeting to accommodate those who want to attend both meetings.

ACTIONS

- Discuss the S&T Needs Process at the next meeting (Facilitation Team)
- Work on a new format for the HTDC reports to focus on deployments of industrial technologies (Contractors)
- Examine the HTDC and how it is to function in the future (ad hoc group)
- Pursue Pete Knollmeyer's recommendation of a pilot project at the Site Management Board (Bob Rosselli)
- Resolve the ITRD issues (offline group led by Barbara Harper and Jerry White)
- Prepare list of past demonstrations and deployments to track (Bob Rosselli)

HANFORD SITE TECHNOLOGY COORDINATION GROUP MANAGEMENT COUNCIL MEETING MINUTES

May 20, 1998
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INTRODUCTIONS/ANNOUNCEMENTS

Bob Rosselli opened the meeting in Lloyd Piper's absence. Introductions were made.

Announcements

Fluor Daniel Hanford (FDH) has a new President, Ron Green, as of May 15. Tom Anderson provided some details on his background. Ron has been with Fluor Daniel for 16 years, coming from the Fluor Daniel Power Group in Oak Ridge. Ron used to work for DOE and has known John Wagoner for 25 years. He has ideas for modest changes in the organization and believes that they need to be seen as contractors who are executing the work with technical excellence. He wants to create a legacy here to truly influence the workers. He feels that FDH must create economic enterprise for the community. He is putting together a 100-day plan now, as well as revising the PHMC strategic plan.

It was also mentioned that Art Clark is the new President of B&W Hanford.

Bob Rosselli presented the Hanford technology program at the EM-30 mid-year review on May 19. EM-50 is faring pretty well in the FY 1999 and FY 2000 budgets. The House suggested raising the science and technology (S&T) budget by \$77M, since they are pleased with EM-50's increased teaming with users and the focus on technology deployment. The budget is still going through the approval process.

Priorities have been identified within *Accelerated Cleanup: Paths to Closure* (ACPC). In a future meeting, we should discuss how the STCG technology needs priorities correlate with the priorities in ACPC. Actually, Hanford's correlation is the highest of any site (our needs matched about 70% of those listed in ACPC), except for spent fuel and plutonium needs. If we spent some time on those areas, we would have an even a closer correlation. It was noted that spent fuel and PFP technologies are already purchased and in the baseline, but they haven't been used yet.

Our communications representative, Mary Ace, developed a handout called "Hanford Science & Technology News Updates". Dave Biancosino asked members to provide feedback to Mary on the format and contents.

Dave Biancosino presented the meeting purpose and agenda.

UPDATES

Concrete Decontamination Video (Shannon Saget, DOE-RL)

Shannon showed a video of three concrete decontamination technologies that were among the 20 technologies demonstrated in the C-Reactor Large-Scale Demonstration.

- Concrete shaver – This is a self-propelled piece of equipment with a diamond blade. It looks similar to an upright vacuum cleaner, and can get within three inches of the wall. It covers about 145 square feet per hour compared to 27 square feet per hour for the baseline technology.
- Concrete grinder – This technology is for hot spots and to get the last three inches of the floor along the wall. It is hand-held, and also has a diamond blade.
- Concrete spaller – This equipment is used in areas where there are cracks or hot spots.

All three technologies are in the C-Reactor toolbox. Thirteen of the technologies demonstrated at C-Reactor will be used at F-Reactor and D-Reactor.

There was a commitment to complete 20 demonstrations at C-Reactor by September 1998. They finished 20 as of May 19, and will do one more by September. A closing ceremony is scheduled for the end of September, and the door will be welded shut at that time.

HTDC Update (Dave Biancosino, DOE-RL)

Dave announced that the monthly reports from FDH and BHI will be distributed to the Management Council as regular updates. He asked if there were any comments on the reports provided this month.

Tom Engel asked why we aren't getting a presentation on the Deployment Center. Dave responded that a handout will be distributed regularly, but not presented. The Deployment Center is really embedded in the performance agreements that are part of the FDH, BHI, and PNNL contracts.

Tom noted that the HAB wants to know about efforts to bring in outside technologies. He wants to know what technologies are being deployed and what outside contractors have gained access to the Site. Dave asked FDH, BHI, and PNNL to summarize progress to date and to modify the report format to improve clarity. Dave, Tom Anderson, Jerry White, and Rod Quinn will discuss this offline. Barbara Harper suggested that this report might be a good place to status the 11 technologies RL has committed to deploy this fiscal year.

Pete Knollmeyer said that the HTDC doesn't look anything like what the STCG endorsed a couple of years ago (e.g., protocols for demonstration and deployment, assistance for proposal preparation). Whatever happened to the Deployment Center? If it's dead, we should say so. Debbie Trader responded that it's not dead. She explained that at the time the HTDC was

endorsed, it was an RL-driven activity. Later it was determined that the HTDC needs to be included in the M&I contract. The point of contact is Tom Anderson.

Bob Rosselli said we should assess whether or not we need the HTDC as originally conceived. Maybe an ad hoc group should be formed to bring recommendations to the Management Council. Bob said that many of the HTDC objectives have been incentivized in the contracts. We need to determine if what we're currently doing is better than what we conceived for the HTDC. Tom Engel and Gary Ballew volunteered to be on the ad hoc group. Jerry White commented that good information sharing is happening between FDH and BHI. Some of the pieces of the HTDC are being worked on, but they aren't visible. There are some good things happening.

Subgroup Oral Reports (Subgroup Leads)

Dave Langstaff, D&D Subgroup Co-Lead, provided an update. The C-Reactor Large-Scale Demonstration is a great story about reaching closure. Lessons learned from C-Reactor have helped the Canyon Disposition Initiative. They are also using the STREAM system.

The D&D Subgroup heard a briefing by COGEMA on its acquisition of decontamination and characterization technologies. They are using chemical foams and gels for surface decontamination, and they are also using the laser. 3-D gamma imaging, which identifies hot spots, is ready to deploy.

Bob Rosselli asked why are we having problems getting technologies on Site to decontaminate metals, when there seem to be a lot out there. Pete Knollmeyer is going to France and will see what technologies they have. He wants an engineering services contract where a private firm is hired to do decontamination. They can bring whatever toolbox of technologies they need to do the job.

Tom Anderson said the PHMC is trying to be proactive in reaching out. They are going out to talk to technology suppliers and are inviting them to come here. For example, they are sponsoring the annual TRICIPE conference at the Coliseum in June to meet vendors and present Hanford's technology needs.

Capabilities have been developed that would be useful for on-site application of the laser. A network is being developed across the country, and a strategy plan is in place. They are actively seeking projects in which to deploy the laser. A letter of intent with Los Alamos National Laboratory has been received that identifies capabilities needed on their site.

Fred Serier, Subcon Subgroup Co-Lead, had no report this month.

Cathy Louie, Tank Subgroup Co-Lead, provided an update. Tank Subgroup meetings are held on the second Tuesday of the month. This Subgroup interacts closely with TFA, since they are co-located at Hanford. The Subgroup has been reviewing technology needs and TFA's responses to the needs over the past few months.

Ellen Dagan, Mixed Waste Subgroup Lead, said that the Mixed Waste Subgroup has expanded its scope to include liquid effluents in the 200 and 300 Areas and the 200-Area lab wastes. The

Subgroup has been working more closely with the Mixed Waste Focus Area (MWFA) lately. Members of the MWFA have visited Hanford and our Subgroup members have visited INEEL. The Subgroup's main technology need area is remote-handled TRU waste. We are one of the few DOE sites that has this problem.

Barbara Harper commented that the lines between science and technology needs are pretty fuzzy. We spend a lot of time focusing on technology needs, and not much time on science needs. She feels that we should focus more attention on science needs. Barbara stated that the science and technology needs assessment process is driven too much by the projects. The STCG must get its arms around the big picture of Site needs instead just reacting to the project-specific "wish lists".

Dirk Dunning added that sometimes a need is an engineering need, or falls between science and technology. We need to make sure engineering needs are captured by the process, too. Dave Biancosino said we would put the subject on the agenda for next month.

Dave provided information on the Accelerated Site Technology Deployment (ASTD) call for proposals. The proposals are due on June 12, and the Subgroups will be reviewing them. We won't have time to get them through the Management Council. John Neath is leading the effort for RL. We are not submitting as many this year; instead we're focusing on quality. The proposals need regulatory and stakeholder involvement, and should be tied to a high-priority Site need and focused on deployment. There is a draft list of about 9 proposals. The AMs have the authority to sign off this year. We will provide an update at the next meeting on which proposals were submitted. The short lead time was the result of uncertainties in the technology budget. We still don't know where the money is coming from.

AM OF THE MONTH (Pete Knollmeyer, DOE-RL, Facility Transition)

Improving the Baseline and Cutting Costs

The biggest failure in the EM-50 effort is too much technology push from the developers and not enough technology pull from the users.

Environmental regulations are well understood because of our good regulators. However, other regulations (such as procurement) are barriers because they are interpreted so narrowly.

Pete reminded the group about a past meeting where we had a panel session with CORPEX and CO2 blasting technology vendors. The main barriers to technology deployment at Hanford identified by these vendors were:

1. Procurement
2. Management resistance
3. Organized labor

We also held a self-assessment brainstorming session on removing barriers. A couple of the possible action items that were identified were:

1. Providing recognition and rewards for breaking down barriers

2. Reducing risk (e.g., don't punish failures when someone tries to bring in new technologies).

We have a poor track record on following through with our recommendations (e.g., the Deployment Center, communications with the outside world and other projects on Site).

We need an early success. Perhaps we could provide recognition for a "Project of the Year". Pete recommended that the STCG champion a pilot project, secure funds, write an RFP, implement the pilot project, and document and communicate baseline improvement.

Tom Engel commented that many of Pete's recommendations were very good. The initial technology pull is crucial. What can be done better to make it happen? In order to transition to technology pull, there must be a champion. We could set up a protocol to institutionalize Pete's recommendations.

Pete said that a procurement agreement is in place that says COGEMA has first right of refusal on engineering work. He's hearing that they are accepting work that they are marginally qualified for. In order to achieve technology pull, you must expect that change to happen, and make sure the decision-makers have the opportunity to go out to see the technologies. There are usually significant barriers to the application of engineering innovation.

Pete suggested that the STCG take the lead to get it done. Tom Anderson agrees that technology pull has to exist. FDH has been looking for a change in culture to make it happen. Dave Olson suggested that instead of trying to stimulate the pull, the STCG should focus on knocking down roadblocks. Roger Collis asked that Lloyd address these comments at the next meeting. He said that either this group does have teeth and can make a difference or not. Someone has to respond to Pete. We need an ad hoc group. A show of hands was positive. Bob Rosselli will bring the subject up at the Site Management Board and then report back.

The next AM of the Month will be Don Wodrich, TWRS, at the July meeting.

ER DEPLOYMENT ISSUES -- John Murphy, DOE-RL

John reminded everyone of the STCG Mission Statement, Element 2: "...Recognize baseline schedule insertion points for technology..." and Element 4: "Champion and facilitate demonstration and deployment of innovative technologies...."

He outlined what he felt were roadblocks to technology deployment:

- The need for consensus delays cleanup progress.
- Technology Insertion Points are jeopardized.
- STCG roles and responsibilities are unclear.

He presented the status of the Innovative Treatment Remediation Demonstration (ITRD) Project:

- We need better technology than Pump & Treat.
- In Situ Redox Manipulation is the only groundwater demonstration at Hanford.
- ITRD process steps were to approach RL, discuss the process, and select a site. No technology solution has been selected yet.

The Yakama Indian Nation recently sent a letter to DOE Headquarters indicating that they felt the process was not clearly defined. John is disappointed because they didn't come to the STCG to try to resolve their issues first, instead of sending a letter to HQ.

Impacts of the letter may include:

- EM-40 withdrawal of ITRD funds
- No data for final technology insertion points
- No progress for RL groundwater program
- Discouragement to RL projects (and outside technology sources)
- Confusion on how to demonstrate technology
- Confusion on STCG's roles and responsibilities

Barbara Harper commented that she has actually been pleased with the way the ITRD project has been running. The confusion comes from conversations with Mike Hightower. She doesn't think he gave clear answers regarding the project structure being defined up front to provide filter gates for technologies to "drop off the plate".

Bob Rosselli thinks it was inappropriate for the Yakamas to send the letter, since it was a violation of trust and integrity. He doesn't think the Management Council has ever shown anyone that we don't want to listen and be responsible. It goes beyond this particular project, and is not a positive symptom. What's the incentive for projects to want to make progress if this is what happens? We have spent a lot of time over the years developing a relationship built on trust. Issues should be discussed within the group before a letter is sent. Do we think the ITRD Project is the right thing to do? If we do, let the project managers work and let's support them. If you have questions, bring them up. Concerns on process will be heard, but let's do it in the proper forum.

Roger Collis sees that the STCG is the way to resolve many of these issues. He didn't want to comment on this specific item, but suggested that if John needs an action, let's move forward. The energy of this group should move into a constructive mode.

Jerry White agrees with Bob's concern. He thinks this is a symptom of where this group has been leading over the last several months. The reaction of this group has been to bring up all the reasons for why something can't be done. Are we really here to support technology? Project managers out at the Site would like nothing more than to use technology. But if they get beat up every time they try, technology pull will be dead. We need to incentivize them.

Doug Huston noted that the Yakamas didn't get the answers they wanted. The questions are still unresolved, but they should have been asked of the people here, not Mike Hightower, since RL is managing the process. Bob Rosselli said that a contractor is not going to run any project on Site without DOE being cognizant. Doug asked why we are still asking what the STCG roles and responsibilities are. It's not a good sign.

Tom Engel doesn't believe that we are here to encourage technology--only technology that makes sense. It is very legitimate to ask if the technology meets the need. Good protocol should start at the lower level to launch your protest and then go to a higher level if not addressed at the lower

level. He thinks that certain points in the Yakamas' letter make sense. If there is a lack of clarity, maybe this is a good start to developing performance criteria.

John Murphy asked if the STCG endorses this process. Tom Anderson said that we could vote on it to see if STCG approves it, but that the vote shouldn't infringe on the rights of any individual to stop them from sending letters to HQ.

Barbara Harper had two comments. First, this forum doesn't substitute for the government-to-government communication that must occur. Second, this letter doesn't say that the ITRD Project can't go forward. Where does the buck stop to resolve this issue? The issue apparently wasn't brought back to the RL client from Hightower. She thinks the process questions will come up for the few remaining technologies. Obviously we have some "bridge mending" to do.

Dave Olson noted that the letter was dated March 27, the day after the ITRD workshop. He said that a lot of the questions in the letter would be answered later. Treatability tests can be set up to answer a lot of the questions, but we can't get out of the starting box to do the testing. We can't get any data to evaluate. At some point, it's DOE's role to decide on whether to test a technology or not.

Barbara said that everything was on the table. We need to know what the filters are for technologies falling off the table. Those filters are still unclear. There must be some criteria. Gordon Rogers perceives the key of the letter as who gets to break the ties. It is a clear challenge to the authority vested in DOE to make the decisions and be the tiebreakers. He shares concern that this should be directed to senior RL managers without attempting to resolve it by the letter. The letter is a direct challenge to the legally appointed parties. He urged the Management Council to vote to resolve these issues here. Long-term pump and treat is not acceptable.

Stan Sobczyk noted that there is some frustration among the Tribes because they feel that DOE is not as forthcoming with information as they would like. Bob Rosselli said that the STCG has never violated that on items that have come before the Management Council.

Pete Knollmeyer said that the STCG doesn't replace the needed communication between projects and tribes. The STCG should hear all opinions, but issues will still occur. He said it sounded like Dave Olson's project was going to lose money and asked him what he wanted the STCG to do.

Dave said that, for this project, we can do some damage control. Hightower is coming next month to talk about technologies and stakeholders are invited. There is the potential to lose the money.

Jerry White said we need to support having projects looking for better technologies. That's what this group should be doing. The first reaction is negative; why can't it be positive? The ITRD process was designed to bring all the players together. The process won't go forward if, after the very first meeting, the reaction is to send this type of letter. Don't kill the process up front.

David Olson's perspective is that if several technologies are candidates, we need to collect data and go forward. If one group says that you can't even go out and test the technologies, then why

go forward with the process? At the workshop, someone had a problem (constraint) with each technology. If we have to get 100% consensus, then we should stop the process now.

Doug Huston suggested that Dave may have run up against a showstopper. David said that, ultimately, someone has to make a decision. Bob Rosselli said that, after the debate, someone has to decide what you go ahead with. RL does that with the regulatory bodies.

Mike Jacobsen said that it is a process issue of chain of command. Is Jim Owendoff going to answer the Yakamas' questions, or can we do it in the Management Council? DOE feels like this was an end run.

Tom Engel said that some of these issues go beyond what the STCG can do. There is no issue of one stakeholder blocking the vote. He thinks the criteria suggested by the Yakamas look good. We should bring this to a vote and go on.

Barbara Harper suggested that the STCG recommend a more concrete path forward. They could clarify it. She agreed to work through this offline. John Murphy asked if the STCG has the responsibility to take this position. Bob Rosselli thought the group endorsed the ITRD. The question now is, do we have the right criteria on how to go forward.

Dave Olson said that this is a DOE Sitewide issue. What is our policy in trying to go forward to test something if there is a dissenting position? We have a responsibility to clean up the Site. Tom Engel doesn't feel this is an issue for the STCG. Arlene Tortoso disagreed. She said that they are trying to pull in technology, but the STCG doesn't support it. There is never an issue that is clear-cut. We take a step and if there's not complete consensus then we have to back up. There's not a clear path to getting things done. A technology may be favored today, but if one person speaks out against it in the future, it can be cancelled.

A future agenda topic should be "What does STCG mean by supporting a technology?" Bob Rosselli said that, relative to this project, he's going to try to find out what this means. The ITRD was to come up with a list of solutions, then test various solutions and analyze data to find out which one to go forward with. When the STCG endorsed the ITRD, his feeling was that it was endorsed all the way.

Tom Engel commented that this is not the HAB or DOE-HQ. What we focus on is technology issues. Members should take potential issues back to their organizations (e.g., HAB and YIN). He can't accept Arlene's position that she can make decisions for deployment. Arlene said that she was not talking about deployment. She feels she should be responsible to make decisions on testing technologies.

Barbara suggested an offline meeting to set a clear path forward. Bob Rosselli said that this group has endorsed and supported the ITRD project. The issues brought forth in the letter will be dealt with along the way. Dave Olson will include these issues as the first topic of the next ITRD meeting. Jerry White said that we need to push back on asking Hightower to do something. He is only helping; RL is running the project. Bob Rosselli concluded that we are going to move forward with the project and suggested that, if a smaller group wants to get together, that's OK. Barbara should work with Jerry to get the right group together.

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TOUR

A tour was offered of the Spent Nuclear Fuel Project